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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/981,957 | 10/16/2001 | Brian James Misek | 10010215-1 | 7262 |

7590 04/25/2005
AGILENT TECHNOLOGIES, INC.
Legal Department, DL429
Intellectual Property Administration
P.O. Box 7599
Loveland, CO 80537-0599

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| EXAMINER |
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LUU, THANH X

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| ART UNIT | PAPER NUMBER |
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2878

DATE MAILED: 04/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

EC

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|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/981,957 | MISEK, BRIAN JAMES | |
| | Examiner | Art Unit | |
| | Thanh X. Luu | 2878 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2005.
- 2a) ☐ This action is **FINAL**.
- 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3,5-8,11,14-17 and 22-31 is/are pending in the application.
- 4a) Of the above claim(s) 31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3,5-8,11,14-17 and 22-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some * c) ☐ None of:
 - 1. ☐ Certified copies of the priority documents have been received.
 - 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 18, 2005 has been entered.

Claims 3, 5-8, 11, 14-17 and 22-31 are currently pending.

Election/Restrictions

2. Newly submitted claim 31 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

The inventions are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the process can be carried out in any materially different correlated double sampling circuit.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 31 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Objections

3. Claim 22 is objected to because of the following informalities:

In the last section, Examiner believes Applicant intended to claim --and the second electrode of the second switch--, otherwise, the phrase would be redundant.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 3, 5, 11, 14 and 22-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Yonemoto et al. (U.S. Patent 6,166,769).

Regarding claims 3, 5, 11, 14 and 22-30, Yonemoto et al. disclose (see Fig. 4) a system comprising: an array of photocells (32) that are arranged in rows and columns, and a sequential readout circuit for sequentially reading out the value of the photocells one photocell at a time, wherein the readout circuit includes: a first sampling circuit (38, 38') that includes a first electrode (electrode of 38 near 37) for coupling to a first column and a second electrode (electrode of 38 near 39); a first switch (39) that includes a first electrode coupled to the second electrode of the first sampling circuit, a second

electrode, and a third electrode (gate) for receiving a first sample control signal; wherein the first switch selectively couples the first electrode of the first switch to the second electrode of the first switch when the first sample control signal is asserted; wherein the first sampling circuit samples a light signal and a reset signal from each photocell in the first column; a second sampling circuit and second switch (see elements in adjacent column, not labeled) as claimed; and an amplifier (43) that includes a negative input terminal coupled to the second electrode of the first and second switches; wherein the amplifier includes an output terminal for generating a signal that corresponds to the amount of light received by a particular photocell in the array. Yonemoto et al. also disclose (see Fig. 4) determining a difference (47) between the light signal and the reset signal, and an integration capacitor (44) as claimed. Yonemoto et al. further disclose (see Fig. 4) the sampling circuit includes a sampling capacitor (38 or 38').

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 6, 7, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yonemoto et al. in view of Simerly et al. (U.S. Patent 5,982,424).

Regarding claims 6, 7, 15 and 16, Yonemoto et al. disclose the claimed invention as set forth above. Yonemoto et al. do not specifically disclose a level shifting or gain manipulation circuit as claimed. Simerly et al. teach (see col. 7, lines 35-47) level

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shifting and gain manipulating in a similar system. Simerly et al. further recognize that level shifting and gain manipulation accounts for variations in dynamic ranges among frames. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide such a configuration in the apparatus of Yonemoto et al. in view of Simerly et al. to improve detection as taught.

8. Claims 8 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yonemoto et al. in view of Krymski (U.S. Patent 6,222,175).

Regarding claims 8 and 17, Yonemoto et al. disclose the claimed invention as set forth above. Yonemoto et al. do not specifically disclose a photocell circuit as claimed. Krymski teaches (see Fig. 4) a photocell circuit (50) as claimed. Krymski recognizes that such a configuration is conventional and well known in the art. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide such a configuration in the apparatus of Yonemoto et al. in view of Krymski to obtain active pixel readout and improve detection.

Response to Arguments

9. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh X. Luu whose telephone number is 571-272-2441. The examiner can normally be reached on M-F 6:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

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supervisor, Dave Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thanh X Luu
Primary Examiner
Art Unit 2878

05/2005